



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/633,320

08/07/2000

George H. Buabbud

560043610121

3464

7590

09/21/2004

David B. Cochran  
Jones Day Reavis & Pogue  
North Point  
901 Lakeside Avenue  
Cleveland, OH 44114

EXAMINER

SRIVASTAVA, VIVEK

ART UNIT

PAPER NUMBER

2611

DATE MAILED: 09/21/2004

5

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/633,320

**Applicant(s)**

BUABBUD, GEORGE H.

**Examiner**

Vivek Srivastava

**Art Unit**

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-4 and 11-16 is/are allowed.
- 6) ☒ Claim(s) 5-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 5 – 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frigo et al (5,742,414 – cited by Applicant).**

Regarding claims 5, 6 and 10, Frigo discloses an optical communication system transmitting light at a first wavelength carrying first RF signals having a first frequency band (see col 2 lines 29-43) from a first location to a multiplicity of second locations and bi-directionally transmitting light at a second wavelength for carrying both upstream and downstream telephony signals on a single optical path extending at least partially between first location and multiplicity of second locations (see col 2 lines 43-60) and further modulating transmitted light or second wavelength traveling from one the second locations to the first location (see col 2 lines 43-60, col 3 lines 1-10, col 6 lines 54-67). It is inherent that in an optical system a first light generator, pair of second light generators and a photo detector would be included.

Frigo fails to disclose comparator circuitry for comparing the signal strength of received RF signals within the second RF frequency band to a preset threshold and

Art Unit: 2611

inhibiting further transmission of RF signals within second RF frequency band if signals are not equal to or greater than the preset threshold.

The Examiner takes Official Notice it would have been well known to include a system to compare and test a received signal with a predetermined threshold and to inhibit further transmission of the signal to ensure the RF signals are transmitted at their desired levels thus also ensuring the system is functioning correctly.

Regarding claim 7, Frigo discloses fails to disclose extracting telephony signals at one of the anode or cathode of a photo diode and second RF signals at the other one of anode or cathode of diode.

The Examiner Takes Official notice it is notoriously well known that a photo diode is a highly regarded and well established means for extracting signals in an optical communication system. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Frigo to include the claimed photo diode to provide a highly regarded and well established means for extracting optical signals.

Regarding claims 8 and 9, Frigo fails to disclose the specific frequency band, in particular a first frequency band between 50 and 870 MHz and a second frequency band between 5 and 50 MHz..

The Examiner takes Official Notice that a downstream frequency band of 50 to 870 MHz and an upstream frequency band of 5 and 50 MHz is well known and well established for transmitting downstream and upstream signals. Therefore, it would have been obvious to one having ordinary skill in the art to modify Frigo to include the

Art Unit: 2611

claimed first frequency band and second frequency band to provide transmission over well established and predetermined downstream and upstream frequency ranges.

***Allowable Subject Matter***

Claims 1-4 and 11-16 are allowed.

***Conclusion***

**I. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.**

Kenner et al (6,181,867) – video storage and retrieval system

Thacker (6,163,537) – telephone return link using fiber

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

(703) 872-9314, (for formal communications intended for entry)

**Or:**

Art Unit: 2611

(703) 308- 5399 (for informal or draft communications, please label

"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121

Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vivek Srivastava whose telephone number is (703) 305 - 4038. The examiner can normally be reached on Monday - Thursday from 8:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Grant, can be reached at (703) 305 - 4755.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is (703) 305 - 3900.

9/18/04

VS



VIVEK SRIVASTAVA  
PRIMARY EXAMINER